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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,875	01/20/2004	George Nordstrom	81092030	1874
28395 7590 09/17/2007 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER KARLS, SHAY LYNN	
			ART UNIT 1744	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/707,875	NORDSTROM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shay L. Karls	1744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 16-20, 24 and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Newly submitted claims 24 and 25 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The applicant previously elected figure 5 and claims 24 and 25 are directed to figures 1-4.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-25 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the surface" in line 9. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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**Claims 1, 5-8, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hess (USPN 3852923).**

With regards to claim 1, Hess teaches system comprising a machine tool (drill rod: col. 3, lines 28-29) having a spindle (53) to fit within a housing (pipe 50) that is spaced from the spindle. There is a planar curved support plate (18, 19) and a rigid arbor (13) attached to the support plate. The arbor is adapted for attachment to the spindle (figure 2). There is a cleaning member (44-47) disposed on and extending from the support plate and the cleaning member contacts a surface of the machine tool (the housing) to remove contaminants from an interior surface of the housing when the rigid arbor is attached to the spindle.

With regards to claim 5, the cleaning member is disposed along an outside edge of the support plate (figure 1)

With regards to claim 6, the cleaning member is disposed radially about the axis of rotation. The axis of rotation is located about the arbor (13) and the cleaning members extend outwardly from the axis.

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate. The angle is 0 or 180 degrees.

With regards to claim 8, there is further a conduit (60) disposed on the support plate. The conduit is connected to a source of pressurized fluid (coolant). There is an aperture (14) for discharging fluid.

With regards to claim 22, the machine tool is configured to move the spindle along a plurality of rectilinear axes. The machine tool can be physically moved to change to location of the spindle and therefore it can be positioned in a plurality of rectilinear axes.

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With regards to claim 23, the housing is disposed completely around at least a portion of the spindle (figure 2 shows the pipe completely surrounding the spindle).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-7, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over webpage “#3956-01 Var.-Speed MultiPro® Kit w/Flex-Shaft” herein referred to as “Dremel” in view of Hess (‘923).**

Dremel teaches a machine tool comprising a spindle adapted to turn about an axis of rotation. There is a rigid arbor fixedly disposed on a planar curved support plate. The arbor is attached to the spindle (they are shown as separate parts however, they are capable of being attached together). There is a cleaning member disposed on and extending from the support plate.

With regards to claim 2, the cleaning member is a plurality of bristles (bristle brushes).

With regards to claim 3, the cleaning member is a flexible wiper (rubber polishing points).

With regards to claim 4, the cleaning member is disposed along an inside edge and an outside edge (since the bristles are connected in the middle and are radially extending outward) of the support plate for cleaning an exterior surface of the spindle (claim 1 states that the cleaning member cleans the inside surface of the housing when the arbor is attached to the

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spindle, however the claim does not state that the cleaning member needs to be attached to the spindle when cleaning the outside surface of the spindle).

With regards to claim 6, the cleaning member is disposed radially about the axis of rotation.

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate (the bristles are angled between 0 and 90).

With regards to claim 22, the machine tool is configured to move the spindle along a plurality of rectilinear axes. The machine tool can be physically moved to change to location of the spindle and therefore it can be positioned in a plurality of rectilinear axes.

Dremel teaches all the essential elements of the claimed invention however fails to teach that the machine tool comprises a housing spaced apart from the spindle. Hess teaches a cylindrical pipe (50) that needs to be cleaned. The Dremel machine tool can be used to clean the inside of pipes such as the one taught by Hess (claim 5), when the spindle is located completely within the pipe (claim 23). The pipe of Hess can be considered a machine tool housing once the machine tool is positioned within. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Dremel tool in the pipe or housing of Hess so that the inside surface can be cleaned. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective function, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.



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**Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable Hess ('923) or "Dremel" as applied to claim 1 above and further in view of Gustafson (PGPub 2001/0040017).**

Hess and Dremel teach all the essential elements of the claimed invention however fail to teach that the machine tool is a computer numerically controlled machine tool. Gustafson teaches a drill, mill press, lathe and grinder machine tools wherein the machine tools are computer numerically controlled (paragraphs [0033] and [0036]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the machine tools of Hess and Dremel with a computer numerically controlled machine tool since they are precise, fast and do not require a user to operate. The machine tool can be pre-programmed with a cleaning plan so that the housing can be cleaned with precision and timeliness without any supervision. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective function, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5 of copending Application No. 10/904459. Although the conflicting claims are not identical, they are not patentably distinct from each other because '459 teaches a machine tool having a spindle and a housing spaced from the spindle. There is a cleaning member with an arbor that is attached to the spindle. The cleaning member contacts an inner surface of the housing of the machine tool. The cleaning member comprises either a plurality of bristles or flexible wiper. The cleaning member is disposed on an outside end. It is inherent that the cleaning members must be attached to support of some type however '459 fails to teach that the support is planar. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cleaning member so that it attached to a planar support since changing shape is a modification that has been considered to be within the level of skill in the art. MPEP 2144.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

Claims 9-15 are allowed.

The following is an examiner's statement of reasons for allowance:



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Claim 9 includes the limitations of a fixture comprising a mounting plate and a bearing block. There is a support plate attached to the fixture via the bearing block, with a cleaning member disposed on the plate. The claim states that the fixture is located within a housing and that the support plate has a first coupling member on the support plate, which engages a second coupling member on the spindle. Given that the limitations in the body of the claim rely on structure from the preamble, the preamble is given meaning in the claim. Therefore, since the fixture is located in a housing and that a first coupling engages a second coupling on the spindle, the claimed combination of the machine tool and the apparatus for dislodging surface contaminants is allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments filed 7/20/07, with respect to Hess, have been fully considered but they are not persuasive.

The applicant states that Hess does not teach a planar support. Planar according to dictionary.com is defined as having a two dimensional characteristic. The support of Hess can be considered planar curved since it has a two dimensional characteristic. Further a planar curve is a curve with two-dimensions ([www.2dcurves.com](http://www.2dcurves.com)) and therefore, term planar can be interpreted as any shape taking on two dimensions). Since the applicant has not further defined what planar is, the reference of Hess meets the claim limitations.

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The applicant further states that a *prima facie* case has not been established for the rejection of claim 4 with respect to Hess. This argument holds no weight since claim 4 was never rejected by the Hess reference.

The applicant further states that Hess does not teach a cleaning member but instead teaches cutting bars. Column 4, lines 20-29 state that the abrading bars are used to help remove debris from the inside surface of the pipe. Abrading bars can then be considered cleaning members because they help to remove debris.

Regarding the Dremel reference, a new rejection was made to provide support for the housing (pipe) that the Dremel is cleaning.

Further the applicant states that Dremel does not teach a flexible wiper however this was clearly shown with the rubber polishing points. The applicant states that Dremel fails to teach cleaning the exterior surface of a housing, however this limitation is not recited in the claims. The cleaning device only needs to be capable of cleaning an interior surface of a housing. Lastly, the applicant states that Dremel will not function to clean the exterior surface of the spindle since all the bristles point away from the mounting point. While this is true, regarding the direction of the bristles, the arbor can be held by a user and manipulated in any manner to contact the bristles with the spindle. The claim does not state that the arbor needs to be connected to the spindle when cleaning the spindle. The claim states that the arbor only needs to be attached to the spindle when cleaning the interior surface of the housing.

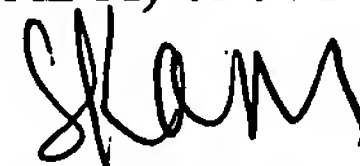
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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shay L Karls  
Patent Examiner  
Art Unit 1744